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(54) Title: COMPOSITION FOR POLISHING METAL, POLISHING METHOD FOR METAL LAYER, AND PRODUCTION METHOD FOR WAFER

(57) Abstract: A metal polishing composition is used for polishing a metal layer and comprises a film forming compound which polymerizes on a surface of the metal layer, forming a polymer film on the surface of the metal layer. A polishing method for the metal layer comprises a step of polishing and planarizing the metal layer using the metal polishing composition. A production method for a wafer comprises a step of polishing and planarizing a metal layer which is formed on top of a wafer that contains recesses so as to fill and cover the recesses, by the polishing method for a metal layer. According to the composition and polishing method, dishing is prevented to improve the planarity, and the polishing rate for polishing metal layers, and particularly copper layers, is improved, enabling high speed polishing at low pressure. Furthermore, because scratching of the metal layer is also prevented, the yield improves.

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ABSTRACT

A metal polishing composition is used for polishing a metal layer and comprises a film forming compound which
5 polymerizes on a surface of the metal layer, forming a polymer film on the surface of the metal layer. A polishing method for the metal layer comprises a step of polishing and planarizing the metal layer using the metal polishing composition. A production method for a wafer comprises a step
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15 for polishing metal layers, and particularly copper layers, is improved, enabling high speed polishing at low pressure. Furthermore, because scratching of the metal layer is also prevented, the yield improves.